DOCUMENT RESUME

ED 220 526 TM 820 548

AUTHOR Ramirez, Maria P.
TITLE Assessment of Academic Self-Concept in College Students: Validation of a Scale for the Spanish Language.
PUB DATE Mar 82
NOTE 13p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Achievement; Anxiety; Grade Point Average; *Higher Education; Measures (Individuals); *Self Concept; *Self Concept Measures; *Spanish Speaking; Test Construction; *Test Validity
IDENTIFIERS *Academic Self Concept Scale; Puerto Rico

ABSTRACT

The translation and adaptation for a Spanish speaking college population of the Academic Self-Concept Scale (ASCS) developed by Reynolds et al. (1980) was studied to report the initial validation results. A total of 485 students in five different colleges in Puerto Rico responded to items in this scale. In addition, information on the academic progress (grade point average), general self-concept, and anxiety levels of the students was obtained. An internal consistency reliability estimate of .94 was obtained for the ASCS-S in this study. Significant positive correlations were obtained between scores on the ASCS-S and grade point average, and general self-concept. These and other data lend support to the reliability and validity of the ASCS-S as a measure of academic self-concept. (Author/PN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED220526

Assessment of Academic Self-Concept in College Students: Validation of a Scale for the Spanish Language

Maria P. Ramirez
State University of New York-Albany

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M. P. Ramirez

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the Annual Meeting
American Educational Research Association
New York City
March, 1982

TM 820 518

Assessment of Academic Self-Concept in College Students Validation of a Scale for the Spanish Language

Information concerning the translation and adaptation of the Academic Self-Concept Scale developed by Reynolds et al. (1980) for a Spanish speaking college population was obtained. The ASCS-S was developed as a measure of an academic facet of general self-concept in college students. A total of 485 students in five different colleges in Puerto Rico responded to items in this scale. In addition, information on the academic progress (GPA), general self-concept, and anxiety levels of the students was obtained. An internal consistency reliability estimate of .94 was obtained for the ASCS-S in this study. Significant positive correlations were obtained between scores on the ASCS-S and GPA, and general self-concept (Rosenberg). These and other data lend support to the reliability and validity of the ASCS-S as a measure of academic self-concept.

Assessment of Academic Self-Concept in College Students: Validation of a Scale for the Spanish Language

Academic Self-Concept, as a facet of general self-concept, has received considerable attention in the last decade. Shavelson, Hubner, and Stanton (1976), among others, propose a model of general self-concept composed of two major dimensions, one academic and the other non-academic. By fragmenting these two dimensions into the different facets they encompass, they created a nomological net helpful in explaining variations in the self-concept of an individual. Among the variables that affect the academic self-concept of a person is the general affective status of the individual. Variations of this characteristic will generally be goberned by a number of situational and environmental variables.

More recently, Shavelson (1980) has studied academic self-concept as it relates to high school achievement. Significant correlations between self-concept and academic achievement for the lower grades were also found by other authors (Kunce, Getsinger & Miller, 1972; Simon & Simon, 1975; Rubin, 1978). Academic self-concept within both contexts, high school and grammar school, has been found to be related to the internal standards of performance of the individual and by other school related experiences.

The primary source of reinforcement in a school situation is course grades. An individual will, in general, establish an internal standard of performance as to what constitutes positive and/or negative reinforcement. For some individuals a grade of A will constitute positive reinforcement, while for other a grade of B will be sufficient. These internal standards then, will have an effect over how well the individual perceives his or her own academic progress. These standards will have an indirect effect over the academic self-concept of the individual. It is expected that positive rewards will tend to improve the way in which individuals perceive themselves academically, while negative rewards will tend to lower one's attitude toward himself.

Within the range of school related experiences, we expect that events such as peer reactions, the opinion of significant others, social relationships and a number of other factors will also have an indirect effect over the academic self-concept of the individual. To the extent that these experiences exert a positive or negative influence on the individual, academic self-concept can be expected to vary accordingly. Like with personal standards of performance, it is expected that positive experiences (ie. praise from significant others) will tend to enhance

the academic self-concept of the individual, while negative experiences will act in detriment of it.

The purpose of this study was to report initial validation results on an academic self-concept scale, that will help obtain valuable information for the assessment of academic self-concept in college students. Academic self-concept was investigated in relationship to such variables as academic achievement and general self-concept of the individual. In addition, its relationship with anxiety was examined. It was expected that significant positive correlations would be obtained between academic self-concept and both academic achievement and general self-concept. On the other hand, anxiety level was expected to have a significantly negative correlation with academic self-concept.

Method

Subjects

Participants were 485 students from five different colleges in three different areas of Puerto Rico. Approximately 32% of the subjects were male, 68% female. Subject's age ranged from 17 to 54 with an average age of 22 (SD= 5.2). The students represented a wide range of discipline majors. As far as years in college was

concerned, 24% were freshman, 22% were sophomore, 30% were junior, and 24% were senior. A mean grade point average (GPA) of 2.75 (SD= 5.2) and 2.95 (SD= 5.7) were reported for general area of study and area of concentration respectively. A four point scale in which a grade of A was 4.0 was used by the subjects in their ratings.

Scale

The Academic Self-Concept Scale (ASCS) developed by Reynolds, Ramirez, Magina and Allen (1980) is a measure of an academic facet of general self-concept in college students. It consists of 40 items worded to conform to a four-point Lykert scale (strongly disagree to strongly agree). In order to use the ASCS as an instrument of this facet of self-concept in Spanish speaking college students a translation of the scale into Spanish was developed by this author. Care was taken to use a general form of the Spanish language that would accomodate to different areas and therefore reduce the possibility of being a culture specific instrument.

Items in the scale were translated into Spanish and then submitted to four independent judges. These judges were asked to evaluate each item of the scale in terms of accuracy of translation, degree to which the overall meaning of the item was conveyed, and how well each item adapted to the educational reality of the group with which

it was intended to be used. Item to total score correlations of .40 and above were obtained for all items in the scale.

Validation Measures

Procedures to validate the ASCS-S paralleled those followed in the development of the original scale (Reynolds et al., 1980). The major expectation was that the ASCS-S would correlate significantly with measures of academic success, and general self-concept. Academic success was measured in terms of GPA. The Rosenberg (1965) Self-Esteem Inventory was employed as a measure of general self-concept. This scale is widely used as an acceptable measure of general self-concept (Robinson and Shaver, 1973). In the current study the internal consistency reliability estimate of the Rosenberg scale was .77 (cronbach, 1951).

In addition, subjects were administered the Trait Anxiety Inventory (Spielberger, 1970). This scale was used to obtain information on the divergent validity of the ASCS-S. The internal consistency reliability estimate of the Anxiety scale in this study was .89. Both, the Rosenberg and the Anxiety scales have been translated and adapted for use with a Spanish speaking population.

Procedure

Prior to being tested in class the subjects were told that their participation in this study was voluntary. They were not informed as to the nature of the measures they were responding to.

Results

Reliability

An item to total score correlational analysis was carried out. Correlations obtained ranged between .40 and .70, for all items. The estimated of internal consistency reliability estimate of the ASCS-S based on Cronbach's (1951) coefficient alpha was .94. Scores obtained for this group approximated a normal distribution with a mean of 114 and a median of 115 (SD= 17.9).

Validity

Validity of the ASCS-S was established in a correlational study with the following variables: a) GPA, b) scores on the Rosenberg scale,and, c) scores on the Anxiety scale. Results of the correlational analysis are presented in Table I. The ASCS-S was correlated .35 ($p<.0001$) with GPA,

---

Insert Table I approximately here

.39 ($p < .0001$) with the Rosenberg scale, and -.39 ($p < .0001$) with the Anxiety scale. The Rosenberg was also correlated with GPA ($r = .35$, $p < .001$), while the Anxiety scale obtained a correlation of -.21 ($p < .001$) with GPA. A correlation of -.42 ($p < .001$) was obtained between the Rosenberg and the Anxiety scales. A multiple regression analysis with GPA, Rosenberg and Anxiety as predictors f ASCS-S scores was carried out. A multiple correlation of .48 ($F = 37.89$, 3/387df, $p < .001$) was obtained for this study.

Conclusions

Results of this study indicated that the ASCS-S shows promise as a reliable and valid measure of academic self-concept. As expected, results indicated a significant positive relationship between scores on the ASCS-S and the academic performance and the general self-concept of an individual. Individuals with higher degree of general self-concept then, tend to show higher levels of academic self-concept, and viceversa. This relationship also hold were academic performance is concerned. Results also suggest that individuals with higher levels of academic self-concept will tend to experience lower levels of anxiety. In general, the ASCS-S appears to be consistent with the multifaceted structure of self-concept postulated by Shavelson et al. (1976).

References

Brookover, W. B., Paterson, A. & Thomas, S. Self-concept of ability and school achievement. USOE Cooperative Research Report, Project No. 845, Michigan State University, 1962.

Cronbach, L. J. Coefficient alpha and the internal structure of tests. Psychometrika, 1951, 16, 297-334.

Kunce, J. T., Getsinger, S. H., & Miller, D. E. Educational Implications of Self-Esteem. Psychology in the Schools, 1972, 9, 314-316.

Reynolds, W. M., Ramírez, M. P., Magriña, A., & Allen, J. E. Initial Development and Validation of the Academic Self- Concept Scale. Educational and Psychological Measurement, 1980, 40, 1013-1016.

Robinson, J. P. & Shaver, P. R. Measures of social psychological attitudes. Ann Arbor, Michigan: Survey Research Center, Institute for Social Research, University of Michigan, 1973.

Rosenberg, M. Society and the adolescent self-image. Princeton, N. J.: Princeton University Press, 1965.

Rubin, R. A. Stability of Self-esteem ratings and their relation to academic achievement: a longitudinal study. Psychology in the Schools, 1978, 15, 430-433.

Shavelson, R. J., Hubner, J. J., & Stanton, G. C. Self-concept: validation of construct interpretations.

Review of Educational Research, 1976, 46, 407-411.

Shavelson, R. J. General self-concept, Self-concept of ability, and School achievement. Paper presented at the Annual Meeting of the American Psychological Association , Montreal, 1980.

Simon, W. E. & Simon, M. G. Self-esteem, intelligence and standardized academic achievement. Psychology in the schools, 1975, 12, 97-100.

Spielberger, C. D., Gorsuch, R. L. & Lushene, R. E. Manual for the State Trait Anxiety Inventory (Self-Evaluation Questionnaire). Palo Alto, Ca.: Consulting Psychologists Press, 1970.

Table I

Pearson Product Moment Correlations

for all Variables

	ASCS-S	GPA	Rosenberg	Anxiety
ASCS-S	1.00			
GPA	.35	1.00		
Rosenberg	.39	.35	1.00	
Anxiety	-.39	-.21	-.42	1.00

all obtained correlations were significant , p< .001